7/28/86
42160-1A

A publication of the
Indiana Business Research Center,
Indiana University School of Business

Indiana Business Review

Volume 61, No. 3 July 1986

The National Outlook

Bruce L. Jaffee — GNP, Inflation, and Interest Rates: Will They All Creep Up in 1986? / 2

R. Jeffery Green — The Investment Outlook at Midyear: Mixed Signals / 3

Lawrence S. Davidson — Monetary and Fiscal Policy: Little Change for 1986 / 3

George Lentz — 1986: A Boom Year for Housing, But Not for Other Real Estate / 4

Joseph C. Miller — Net Exports: Continued Improvement / 5

The Indiana Outlook

Richard L. Pfister — A Midyear Review of the 1986 Indiana Forecast: Some Weakening / 6

Robert Kirk — Indianapolis / 6

Thomas L. Guthrie — Fort Wayne / 9

Ashton I. Veramallay — Richmond / 9

John E. Peck — South Bend/Mishawaka—Elkhart/Goshen / 10

Robert R. Jost — Muncie/Anderson / 12

Marvin Fischbaum — Terre Haute / 14

William C. Dunkelberg — Lafayette / 15

Fay Ross Greckel — Jeffersonville—New Albany (Louisville Area) / 16

Maurice Tsai — Evansville / 16

Leslie P. Singer — Gary—Hammond—East Chicago (Calumet Area) / 18

GNP, Inflation, and Interest Rates: Will They All Creep Up in 1986?

In this issue . . .

In this midyear outlook for the economy, we reflect upon last fall's forecast, which was published in the November-December issue of the *Indiana Business Review*. Several faculty members in the Indiana University School of Business were asked to update their forecasts and to take a look at their predictions for 1986 in light of the events that occurred in the first four months of the year.

The reviews do not update all sectors of the economy comprehensively. Rather, they focus on areas that either have undergone significant changes since our last forecast or, we believe, will be of special interest to *IBR* readers.

Reports from several key areas around the state show how events within the last six months have affected regional economic trends.

Bruce L. Jaffee

The June issue appeared as Volume 60, No. 2. It should have been numbered Volume 61.

Indiana Business Review

Published six times each year by the Indiana Business Research Center, Graduate School of Business, Indiana University.

Jack R. Wentworth, Dean
Morton J. Marcus, Director and Editor

Judith Schroeder Weisstein, Managing Editor; Lowell McCoskey, Systems and Programming Manager; Dianne Vandivier, Editorial Assistant; Kristi Hayes, Graphics Assistant; Vicki Blackwell, Compositor Coordinator; Melva Needham, Circulation; Nikki Livingston, Secretary; Jo Clontz, Office Manager; Louise B. Brown, Project Coordinator.

Unless otherwise noted, information appearing in the *Indiana Business Review* is derived from material obtained by the Indiana Business Research Center for instruction in the School of Business and for studies published by the Center. Subscriptions to the *Indiana Business Review* are available to Indiana residents without charge.

Bruce L. Jaffee

Associate Professor of Business Economics and Public Policy, Indiana University, Bloomington

In the last six months we have:

- Experienced a rapid boom in both the bond and stock markets;
- Seen an approximately 50% decrease in crude petroleum prices;
- Experienced several months of flat and even negative consumer price changes;
- Witnessed continued sharp declines in the value of the dollar; and
- Seen an increased likelihood that some form of tax reform—though not tax simplification—will be enacted before the end of the year.

On balance, we believe that these changes will be good for the economy and that they are likely to increase expected growth rates in both 1986 and 1987.

The most dramatic effect has been the decrease in petroleum prices. For the rest of this year we expect that spot prices for petroleum will fluctuate around $15 per barrel. The immediate impact of the price decline is somewhat negative in terms of economic growth. The energy-producing sectors in the economy have slashed their expenditures and have cancelled investments because of decreased revenues and profits. However, because on balance the U.S. is a net importer of petroleum, the benefits of lower prices will exceed the costs for virtually all of the nation except the Southwest. Real GNP growth is likely to be in the 4% to 5% annual range for the 12-month period beginning in the second quarter of 1986.

Decreases in interest rates and declines in energy prices have been important factors leading to low inflation during the first five months of 1986. However, we expect that the inflation rate will increase in the latter half of 1986.

Decreases in interest rates and declines in energy prices have been important factors leading to low inflation during the first five months of 1986. However, we expect that the inflation rate will increase in the latter half of 1986 and into 1987 because:

- We see no significant further decreases in either of these variables;
- Government policy is still mildly expansionary;
- Foreign competition for American businesses has been reduced because of weaknesses in the value of the dollar; and
- The economy is moving closer to capacity.

By the end of the year it is likely that consumer prices will rise at about a 5% annual rate. One point has been frequently overlooked: in many parts of the economy, such as the service sector, in the last twelve months inflation has continued to rise in the 5% to 8% range.

In many parts of the economy, such as the service sector, in the last twelve months inflation has continued to rise in the 5% to 8% range.

A further boost to the economy is likely to occur from continued growth in personal consumption expenditures and the strong demand for single-family housing. The rallies in the bond and stock markets are likely to have positive wealth effects. Low inflation through the first five months of this year has meant that real incomes for most households have increased. Tax reform is almost certain to lead to decreases in personal income taxes and therefore increases in disposable income.

Although it is extremely risky to predict the stock and bond markets, we nonetheless will describe general trends. We predict, at best, only moderate increases in stock prices for the rest of this year. For most sectors the likely good news for corporate earnings in the last half of the year is counteracted by somewhat higher rates of inflation and interest rates. We also think that interest rate declines are at or near their

lowest levels. As the economy heats up in the latter half of the year, we would expect to see modest increases in both short- and long-term rates. A prime rate below 8% is very unlikely.

The weak areas of the economy are likely to be the farm sector, energy markets, and banks that have extensive loans to those less developed countries that are oil producers, such as Venezuela, Indonesia, and Mexico. Fortunately this last category excludes most Indiana financial institutions. □

The Investment Outlook at Midyear: Mixed Signals

R. Jeffery Green

Professor of Economics, Indiana University, Bloomington

At the end of 1985 we forecast growth of constant dollar investment expenditures of about 4% in 1986, with residential investment and inventory investment being the strongest components. Figures released during the spring reinforce the notion that residential investment spending and inventory investment will be strong in 1986, but they also indicate that plant and equipment spending is likely to be weaker than we predicted in December.

Residential investment spending and inventory investment will be strong in 1986.

According to a survey conducted by the Department of Commerce from January to March, firms expected to reduce their spending for plant and equipment in early 1986 and to increase spending slowly only later in the year. The weakness appears to be concentrated in manufacturing and mining. The decline in investment in mining is a result of the sharp decline in oil prices, which has brought new drilling and exploration for oil to a virtual standstill. Outside manufacturing, investment spending by public utilities is expected to show little or no growth because of ample capacity. Only investment in the commercial sector shows significant planned increases, and that is a little surprising given the vacancy rates for commercial real estate in some parts of the country.

The data for the GNP accounts, released in late April, indicated that constant dollar expenditures for business equipment fell at a rate of almost 18% in the first quarter. Constant dollar expenditures for structures fell at an annual rate of more than 5% in the same period. Investment spending for plant and equipment is clearly off to a bad start in 1986. However, the first quarter was heavily influenced by the negative developments in the petroleum sector, and we expect some improvement over the rest of the year. Even so, it is unlikely that plant and equipment spending in constant dollars will be any greater at the end of 1986 than it was at the end of 1985.

If plant and equipment spending has been a disappointment so far in 1986, residential investment has surpassed expectations. Constant dollar investment in residential structures increased at an annual rate of almost 10% in the first quarter of 1986. Housing starts have been near a level of two million at an annual rate. Because this level is already quite high, further improvement will be difficult. However, because of continuing income growth and reasonably low interest rates, housing starts are expected to remain high. Residential construction is expected to grow about 7% from the end of 1985 to the end of 1986, which is slightly above the 5% to 6% growth forecast last December.

Inventories rose sharply in the first quarter of 1986. We had expected some additions to inventories but not nearly what was observed in the first quarter. The increase was concentrated in the automobile sector, where inventory stocks are now viewed as excessive.

The inventory/sales ratio in the auto sector is now higher than at any time since the end of the last recession in late 1982. The industry was expecting better sales in the first quarter, and so the increase in auto inventories was largely involuntary. As the industry works off unwanted stocks, we expect inventory accumulation to slow through the remainder of the year and actually to turn negative for automobiles over the next few quarters. For the year 1986 as a whole, inventory accumulation will be substantial and hence contribute to overall growth; however, most of that growth will be concentrated in the first quarter of the year.

In December we forecast a rise in total constant dollar investment expenditures of about 4%. It now seems likely that growth will be between 3.5% and 4%. More significantly, virtually all of this growth will come in the form of residential investment and inventory investment, with little if any improvement coming from business expenditures for plant and equipment. □

Monetary and Fiscal Policy: Little Change for 1986

Lawrence S. Davidson

Associate Professor of Business Economics and Public Policy, Indiana University, Bloomington

Last fall we predicted that the Federal Reserve probably would start to slow the growth rate of the money supply in 1986 and that we would see little impact from any changes in government policy. Reviewing events in the spring, we see little to change our forecast. If the outlook has changed, it has little to do with policies from Washington.

After growing at an annual rate of around 12% during 1985, the money supply has slowed to an annual rate of around 7%

After growing at an annual rate of around 12% during 1985, the money supply has slowed to an annual rate of around 7% in the first quarter of 1986.

in the first quarter of 1986. With inflation and interest rates dropping like a couple of rocks, with increased prospects of fast economic growth for the economy during the second half of 1986, and with a growing fear that the dollar might fall too much, there is less pressure on the Fed to accelerate money growth. In fact, these conditions may induce the Fed to come in on target in 1986, with money growth under its 8% target ceiling.

It appears that changes in the budget acts of 1985 and 1986 and reductions in interest rates will help us reach the 1987 goal without draconian cuts in spending or large tax increases.

The improved economic outlook is also removing some of the worry caused by the passage of the Gramm-Rudman-Hollings Act. Although the government found it relatively easy to meet the deficit limit for fiscal year 1986, there was some nervousness among analysts that meeting the 1987 goal of $144 billion would lead to drastic changes in the budget. It appears now, however, that changes in the budget acts of 1985 and 1986 and reductions in interest rates will help us reach the 1987 goal without draconian cuts in spending or large tax increases. With this news and the likely resolution of the tax reform issue, it appears that the impact of the government sector on the economic outlook for 1986 is unchanged from our forecast last fall. When the Supreme Court has dealt with Gramm-Rudman-Hollings and when Congress has resolved the tax reform issues, we can be more certain of the impacts of those policies, but their effects on the U.S. economy will not be of much significance until 1987. □

1986: A Boom Year for Housing, But Not for Other Real Estate

George Lentz

Assistant Professor of Finance and Real Estate, Indiana University, Indianapolis

Since our last forecast, the decline of mortgage interest rates has been much greater than anticipated. At the time of last fall's forecast, mortgage rates for conventional fixed-rate mortgages averaged 12.07% nationally. For the week ending May 3, rates for the 30-year conventional fixed-rate mortgage had fallen to a national average of about 9.9%. Mortgage rates for the increasingly popular 15-year fixed-rate mortgage are typically one-quarter to one-half percent lower. The initial rate for an adjustable rate mortgage averaged 8.65%. Mortgage rates have not been this low since 1978.

The decline in mortgage rates has increased the affordability of home ownership. In December 1985 the National Association of Realtors Housing Affordability Index reached 100 for the first time since December 1978. The index stood above 100 in January and February, but then dipped slightly below 100 (to 99.6) in March. An affordability index of 100 means that a household earning the median household income can qualify for a mortgage loan covering 80% of the cost of a median-priced existing home. The decline in the value of the March index occurred because housing prices increased more than the median income level.

Single-Family Housing

The increase in housing affordability occasioned by the sharp and largely unanticipated drop in mortgage rates has generated a big increase in single-family housing activity. The U.S. Commerce Department estimated that sales of new single-family homes jumped 27.4% in March from February's sales rate. Sales in March were estimated to be at a seasonally adjusted annual rate of approximately 900,000. New home sales in January and February were slightly above 700,000 each month. March's sales volume was the highest for new homes in the 23 years that the Commerce Department has been keeping track of new-home sales activity. Moreover, March's brisk sales activity, coupled with attempts by builders to keep the number of homes kept in inventory within manageable limits, meant that the builders' inventory of unsold homes was at its lowest level since 1971.

March's sales volume was the highest for new homes in the 23 years that the Commerce Bureau has been keeping track of new-home sales activity.

For the past three years, housing prices have fluctuated month to month, but generally they have increased by less than the inflation rate. Now, however, we are beginning to see signs that the increased sales activity in existing as well as new homes is beginning to exert upward pressure on prices.

The price of a median-priced existing house in March increased 3.4% over the February price (from an estimated $77,500 in February to about $80,000 in March). The median price of existing homes rose only 2.5% for all of 1985 (from $73,800 to $75,500). The average price of a new home was $102,400 in January, $106,600 in February, and $108,200 in March, and preliminary figures for April indicate an average price in excess of $112,000.

The sharp decline in mortgage rates has also brought about an avalanche of refinancings. The mortgage origination activity, including both refinancings and home sales, is at the highest rate ever, and the sheer volume has strained the entire mortgage financing system tremendously. The

refinancing activity should provide a large boost to the economy, however, as lower mortgage payments improve the purchasing power of the average home owner.

Our revised forecast is that 1986 should be a great year for single-family housing. Mortgage rates can be expected to fluctuate somewhat during the remainder of the year, but basic forces in the economy indicate still lower rates this year. However, the precise level of mortgage rates is difficult to predict. Nonetheless, we are now forecasting that rates for a 30-year fixed-rate mortgage will fall to 9-9.5% before the year's end.

Mortgage rates can be expected to fluctuate somewhat during the remainder of the year, but basic forces in the economy indicate still lower rates this year.

In response to lower mortgage rates, housing starts for the year should reach the highest level of the 1980s. We are now forecasting housing starts for 1986 to be in the 1.9-2 million range. Two million housing starts is generally considered a housing boom. The last time that housing starts exceeded two million for an entire year was 1978. The proportion of housing starts that are single-family dwellings should rise, whereas the proportion of these starts that are apartments and condominiums should fall (except perhaps in the Northeast).

The main fly in the ointment for single-family housing is the possibility of sharply rising home prices. If housing prices increase too rapidly, they can negate the increase in affordability due to falling interest rates, and thus dampen housing sales and construction.

Multi-Unit Housing

1985 was a good year for multi-unit residential construction. In fact, 1985 saw apartment starts at their highest level since 1973. A major factor in the high level of apartment starts was a rush to take advantage of tax-exempt financing and the lucrative depreciation tax benefits provided under current tax law before these were eliminated or curtailed by tax reform legislation.

1986, however, probably will not be as good a year for either apartment or condominium construction (except, perhaps, in the Northeast). The sharp increase in housing affordability makes both forms of housing less attractive alternatives to single-family home ownership. Moreover, in many areas of the country, especially in the oil and sun belts, both apartments and condominiums have been overbuilt, resulting in an oversupply. In addition, the impact of proposed tax legislation that has emerged from the Congress to date is likely to dampen investor enthusiasm for apartment buildings.

The Tax Picture

The tax picture remains unclear at this time, although some form of major tax reform legislation appears increasingly likely this year. Home ownership will be little affected by any tax reform legislation. It seems virtually certain that mortgage interest and property taxes will remain deductible for first and second homes. However, if tax rates are cut as proposed, the value of those deductions will diminish.

It seems virtually certain that mortgage interest and property taxes will remain deductible for first and second homes.

On the other hand, it now seems that other forms of real estate, including apartments, will be adversely affected by tax reform legislation. There is widespread sentiment in Congress to "go after" tax shelters. It is also very likely that depreciation for real estate will be spread over a considerably longer time period than under current law and thereby diminished in value. These increasingly likely tax law changes, coupled with the proposed reduction in tax rates, should diminish the attractiveness of real estate investments. One possible impact of these measures is that investors may require higher rents and/or reduced unit purchase prices in order to make up for the loss of tax benefits.

Nonresidential Real Estate

Our forecast for nonresidential real estate is not so optimistic as that for housing. In many areas of the country, especially in the Southwest, there has been a tremendous overbuilding of office buildings. Furthermore, demand for office space should be adversely affected by efforts on the part of U.S. firms to cut costs by reducing their white-collar labor force. The boom in office building construction peaked in the spring of 1985. F. W. Dodge reports a sharp decline in office building starts for the first quarter of 1986, and office construction starts for the remainder of the year should be well below that of the peak years of the 1980s.

Industrial construction is also in decline, due in part to the decline in oil prices and the adverse impact that this has had on the oil and gas sectors of the economy. But the general sluggishness in the manufacturing sector of the economy is also a factor. Industrial construction could increase later in the year if the savings from lower energy prices and lower interest rates can stimulate investment in plant and equipment. Retail construction should benefit somewhat from the increased residential activity. However, there is a great deal of retail floor space currently on the market; therefore, a large amount of new construction is unlikely. □

Net Exports: Continued Improvement

Joseph C. Miller

Professor of Marketing, Indiana University, Bloomington

In December we predicted that the dollar would decline by 30%-35% of its peak February 1985 value against the Japanese yen and West German mark before

leveling out in the second quarter of 1986. In fact, by the end of April the dollar had decreased by 33% of its February 1985 value against the mark and by 34% against the yen. Also, there was some leveling out apparent in late April and early May, but a trend is not yet definite.

Some of the expected benefits of the dollar's decline are beginning to be seen. As the relative prices of U.S. exports fall and import prices rise, U.S. companies that export goods or services become more competitive in world markets and there is less pressure by importers in the U.S. market. Exports have indeed increased in 1986, and there are reports that many U.S. firms are enjoying significant gains in export orders. These reports foretell an acceleration in rising exports for the rest of the year.

Exports have indeed increased in 1986, and there are reports that many U.S. firms are enjoying significant gains in export orders.

However, U.S. imports have been slower to respond to the dollar's decline. The result is that imports continue to rise faster than exports and the U.S. international trade deficit persists. Part of the reason for the slow adjustment is that some U.S. buyers, at least for the time being, apparently are willing to pay the higher prices for high-quality imports. Another part of the explanation is that importers are absorbing the price increase, where buyers are more price sensitive, in order to maintain their sales volumes.

Imports continue to rise faster than exports and the U.S. international trade deficit persists.

Our forecast for the second half of 1986 is that imports will begin to decline as exports rise. As a result, the U.S. trade deficit will diminish. The dollar will stabilize, easing pressures on the Federal Reserve to push up interest rates as a means of protecting the dollar. □

A Midyear Review of the 1986 Indiana Forecast: Some Weakening

Richard L. Pfister

Professor of Applied Urban Economics, Indiana University, Bloomington

The U.S. economy grew more slowly in the first half of 1986 than we had forecast last November. As a result, the growth of personal income in Indiana will not be quite so strong as we expected. We had earlier forecast a growth of about 3% in real personal income between 1985:4 and 1986:4. It now appears that the increase will be only about half that amount. Total establishment employment, however, is expected to increase a little more than our earlier forecast—2.3% versus the earlier 2%.

The bulk of the employment growth will be in nonmanufacturing. Employment in manufacturing will continue to be sluggish.

The bulk of the employment growth will be in nonmanufacturing. Employment in manufacturing will continue to be sluggish. Declines in auto and steel employment will cause durable goods employment to drop a little, but nondurables will grow enough to yield a slight increase overall for manufacturing. In nonmanufacturing, the major employment increases will be in retail trade, construction, and services. Because wages are substantially lower in trade and services than they are in manufacturing, the growth in personal income is considerably less than the growth in overall employment.

The state's unemployment rate has been declining steadily; it was down to 6.9% in February, below the U.S. rate of 7.3%. The Indiana unemployment rate is expected to continue to decline slowly in the remaining months of 1986. This drop is the result of a slowdown in the growth of the labor force in conjunction with slow but steady growth in employment. We tend to be disappointed that our recovery is not more vigorous, but we are much better off now than in 1983, when Indiana's unemployment rate was more than 12%.

During the twelve quarters of recovery from the last recession, Indiana experienced a 12.3% growth in employment, which was slightly above the growth rate for the U.S. Indiana's growth rate for real personal income over these twelve quarters (13.4%) was about two percentage points less than the U.S. rate. The unemployment rate at the trough of the last recession was higher in the state than the national average, so the rate has declined more rapidly in Indiana. In the early part of this recovery, Indiana's growth rate was above the nation's. In more recent months, the nation has outpaced Indiana. □

Indianapolis

Robert Kirk

Professor of Economics, Indiana University-Purdue University at Indianapolis, with data assistance from Ron Martin, Indiana Employment Security Division

The forecast for the second half of 1986 begins by focusing on the role of inventory change. In 1985, spending by consumers was stronger than output because imports satisfied a large part of the demand. The result was a slowdown in inventory accumulation. Higher economic growth in 1986 is expected nationally because restocking of inventories is expected to take place. The question is: Will Indianapolis firms experience the same degree of inventory restocking?

The forecast calls for moderate employment growth (3% annual rate) because a major cyclical industry, the transportation equipment industry (auto parts, diesel engines, and transmissions), appears to have adequate inventories, or can meet the need for additional inventories without additional employment. On the other hand, leading economic indicators derived from labor markets (such as hours worked in

manufacturing and new unemployment insurance claims) for the Indianapolis metropolitan area show no indication of downturn.

The automobile industry, particularly at the small-car end of the market, is becoming like the oil industry in possessing excess world capacity. Although the fall in the dollar relative to the yen has made domestic auto prices relatively more attractive, the foreign auto import share has increased. Factors other than price, such as quality and design, continue to influence the consumers' choice.

A Mixed Picture

The forecast of moderate expansion is based on a mixed picture—optimism from some sectors, but caution from others. **Table 1** provides a comparative analysis of employment change, 1984(I) to 1985(IV), for Indianapolis and competing metropolitan areas. This time period was chosen because it was the most recent period for which a set of consistent definitions of metropolitan areas exists.

Table 1
Comparative Analysis of Employment Change, 1984I-1985IV, by Competing Metropolitan Area and by Major Sector (seasonally adjusted establishment employment)

Area	*Total (% change)*	*Mfg. (% change)*	*Nonmfg. (% change)*
Columbus, Ohio	10.1	5.2	11.2
Detroit	9.2	7.1	10.0
Cincinnati	7.8	2.1	9.6
Chicago	7.0	−3.6	10.0
Louisville	7.0	−2.2	9.7
INDIANAPOLIS	**6.8**	**−3.3**	**9.5**
St. Louis	4.6	−1.0	6.2

The table shows a wide range of change in manufacturing. Indianapolis's manufacturing sector was negatively affected by losses in the electrical equipment industry, with the closing of Western Electric being the most significant. Loss of high-paying manufacturing jobs, in turn, affected household incomes and, therefore, reduced the rate of increase in nonmanufacturing employment compared to what it would have been.

Where have employment changes recently occurred? **Table 2** presents compounded annual rates of change over two expansions, 1975-79 and 1982-85, and the most recent year, 1985, for the Indianapolis metropolitan area by selected sectors.

Total establishment employment growth rates were similar over the two expansions, with a slowdown last year. A reason for the slowdown was durable goods manufacturing. The smaller rate of increase in durables during 1982-85 reflects increased foreign competition and appreciation of the dollar, both of which have created a much more competitive environment for Indianapolis manufacturing. As 1986 progresses, the fall in the dollar should increase manufacturing export demand and result in some employment expansion.

Construction is highly cyclical and therefore shows large employment swings. Rates of growth during both expansions have been similar. Several commercial and public projects should maintain construction employment.

Table 2
Compounded Annual Rates of Employment Change over Business Cycle Expansions, 1975-79 and 1982-85, and Recent Year for Indianapolis Metropolitan Area

Sector	*Compounded Annual Rate of Change*	*Sector*	*Compounded Annual Rate of Change*
Total employment		Wholesale trade	
Dec. 1975-Dec. 1979	4.2	Dec. 1975-Dec. 1979	6.4
Dec. 1982-Dec. 1985	3.9	Dec. 1982-Dec. 1985	3.5
Dec. 1984-Dec. 1985	2.9	Dec. 1984-Dec. 1985	3.5
Manufacturing		Retail trade	
Dec. 1975-Dec. 1979	1.8	Dec. 1975-Dec. 1979	4.5
Dec. 1982-Dec. 1985	0.5	Dec. 1982-Dec. 1985	4.4
Dec. 1984-Dec. 1985	−4.1	Dec. 1984-Dec. 1985	4.0
Durable manufacturing		Finance, Insurance, and Real estate	
Dec. 1975-Dec. 1979	1.8	Dec. 1975-Dec. 1979	4.0
Dec. 1982-Dec. 1985	0.9	Dec. 1982-Dec. 1985	2.4
Dec. 1984-Dec. 1985	−5.4	Dec. 1984-Dec. 1985	3.5
Construction		Services	
Dec. 1975-Dec. 1979	10.1	Dec. 1975-Dec. 1979	7.0
Dec. 1982-Dec. 1985	10.1	Dec. 1982-Dec. 1985	7.3
Dec. 1984-Dec. 1985	7.7	Dec. 1984-Dec. 1985	6.4

Mortgage rates should remain attractive, and single-family housing should enjoy a good year. As people move from apartments to single-family housing, vacancy rates for apartments may edge upward from the 9% level in February.

What about residential construction? If the national economy performs above trend in 1986, then monetary restraint to bring the economy back to trend might result, in the short run, in higher interest rates. However, since long-term inflationary expectations will remain low, the upward pressure should occur at the short-term end of the interest rate yield curve. Thus, mortgage rates should remain attractive, and single-family housing should enjoy a good year. As people move from apartments to single-family housing, vacancy rates for apart-

ments may edge upward from the 9% level in February.

Wholesale trade employment growth was greater during the 1975-79 expansion than it was during the 1982-85 expansion. Retail trade employment growth rates have remained essentially the same. Finance, insurance, and real estate have come back in the last year of the recent expansion from the difficult times insurance had earlier in the recovery.

The services sector, which is not cyclical like construction, has shown high rates of growth. Business services, auto repair, and legal services have shown high *rates* of growth, and business services and health services (not hospitals) have shown large growth *in numbers*.

The Building City

The bricks-and-mortar changes in the Indianapolis skyline are highly visible. Those changes are based on activities that require office space and households that require residential space, factors which, in turn, are derived from employment and population change.

From 1980-84, metropolitan population grew faster than nonmetropolitan population. The turnaround arose from the metropolitan population's maintaining the same rate of growth in the 1980s as it had in the 1970s, while population growth in nonmetropolitan areas slowed considerably.

During the 1970s, nonmetropolitan population nationally grew faster than metropolitan population. However, from 1980-84, metropolitan population grew faster than nonmetropolitan population. The turnaround arose from the metropolitan population's maintaining the same rate of growth in the 1980s as it had in the 1970s, while population growth in nonmetropolitan areas slowed considerably.

The high growth-rate sectors of services, retailing, and construction (as shown in Table 2) in many cases are oriented to urban locations and, as shown in **Table 3**, the growth rates translate into thousands of people.

Table 3
Composition of Employment Change for Indianapolis Metropolitan Area, 1974-85 and March 1985-March 1986, by Major Sector

Sector	1974-85 Number	1974-85 % of Change	March 1985-March 1986 Number	March 1985-March 1986 % of Change
Contracting sector				
Manufacturing	−24,300		−3,498	
Durables	−20,800	86	−3,042	87
Nondurables	− 3,500	14	− 456	13
		100		100
Expanding sectors				
Nonmanufacturing	111,000		19,649	
Construction	3,100	3	1,800	9
Transportation, Communications, Public utilities	4,700	4	840	4
Wholesale trade	7,400	6	1,578	5
Government	8,700	8	2,185	11
Finance, Insurance, and Real estate	8,800	8	1,447	8
Retail trade	26,100	24	4,512	23
Services	52,200	47	7,287	37
		100		100

What do the numbers mean? The job losses in manufacturing have hit black men heavily. Coupled with a higher rate of labor force growth for black men, the result has been a mismatch in supply and demand. The mismatch has had serious implications for the income and well-being of black families. Some analysts suggest that limited economic opportunities for black men are a major factor in the prevalence of female-headed households and in the high incidence of poverty among black children.

The numbers in Table 3 reflect the evolution of an economy from one where the blue-collar/factory work culture is being modified by a white-collar/office work culture—one where highly standardized outputs using mass production techniques are being replaced by rapidly changing, highly customized goods and services. Manufactured goods are *not* becoming obsolete. Rather, an increasing share of the value added of final goods and services is being created from indirect, white-collar work involving advertising, business consulting, research and development, and financial services (thus creating demand for office space), rather than from direct production work, which is being rapidly automated (thus resulting in increasing vacancy rates for manufacturing space).

What are the implications for skills and education? In a manufacturing economy, almost anyone was employable if she or he were willing to work. In a service economy, this is not the case. Thus, those left behind in the educational system are likely to find it difficult to enter the labor market.

The Federal Budget: A Major Uncertainty

A major uncertainty in this forecast is the federal budget. In the calendar year 1985, a switch was made to a tighter fiscal policy when the Administration and Congress reached an agreement on a significant moderation in spending and the Gramm-Rudman deficit reduction legislation was adopted. However, the assumptions of the budget are heroic in terms of stable policies

and sustained strong growth. Further, no allowance is made for contingencies. Monetary policy has become accommodative, but in 1985 there was less bang for each additional dollar because velocity fell. Stability is assumed, but the recent track record suggests volatility. □

Fort Wayne

Thomas L. Guthrie

Director of the Office of Community and Institutional Research and Associate Professor of Business and Economics, Indiana University-Purdue University at Fort Wayne

The future of the Fort Wayne metropolitan area economy for 1986 remains bright. In fact, the performance year to date, combined with the planned start-up of the new General Motors truck-assembly plant this fall, suggests the likelihood of an even higher level of economic activity for the year than originally forecast.

According to recent revisions of the Fort Wayne area payroll employment data, economic growth in both 1984 and 1985 was greater than first indicated. Based on quarterly reports filed by all employers, estimates of employment through December 1984 and December 1985 were revised upward 3,000 and 1,300, respectively. The **Figure** shows the profile of growth for the current expansionary cycle for the Fort Wayne area compared with the Great Lakes (Illinois, Indiana, Michigan, Ohio, and Wisconsin) region. Employment growth in the Fort Wayne area has exceeded growth in the Great Lakes region in each of the last three years.

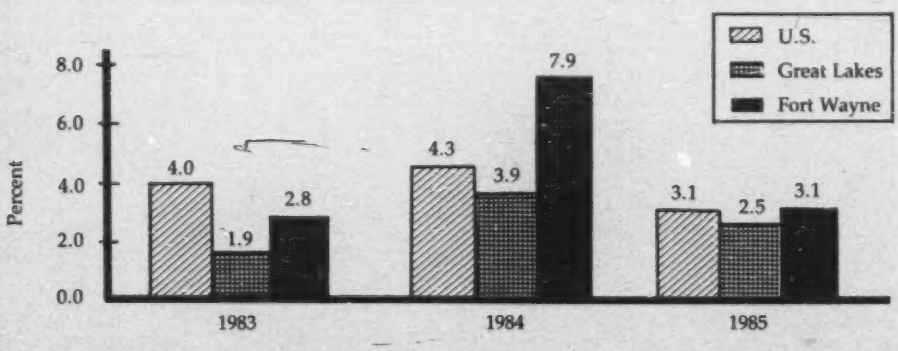
Total nonagricultural payroll employment in the Fort Wayne area—Allen, DeKalb, and Whitley Counties—was originally forecast to increase approximately 4% in 1986 (Nov.-Dec. 1985 *IBR*). Although the forecast is comparable with the 3.1% growth experienced in 1985 employment, there is evidence that it should be increased one to two percentage points. First, the annualized growth rate for 1985 is misleading. Growth stagnated during the first half of the year and accelerated during the second half. During the fourth quarter of 1985 and the first quarter of 1986, area employment has been growing in excess of 5% annualized.

During the fourth quarter of 1985 and the first quarter of 1986, area employment has been growing in excess of 5% annualized.

Second, GM is just starting to gear up to reach a projected employment of 1,700 by this fall. Plans are to add an additional shift later to bring employment to 3,000 by the summer of 1987.

Third, it is now clear that most of the GM employment will be transfers, not local hires; therefore, the multiplier effect of the GM employment on total employment is going to be relatively large. The local housing market provides the classic example of this multiplier effect. Vacant rental housing is reportedly not available; consequently, the pace of both rental and owned housing construction is exuberant. For example, the number of building permits issued for new single-family houses in Allen County in February was the highest in the last 19 years for which data are available. □

Percentage Change in Nonagricultural Payroll Employment for the U.S., Great Lakes Region, and Fort Wayne Area 1983-1985



Note: The Great Lakes region comprises Illinois, Indiana, Michigan, Ohio, and Wisconsin.
Source: U.S. and Great Lakes region data are from *Employment and Earnings*, U.S. Department of Labor. Fort Wayne metropolitan area data are from the Indiana Employment Security Division.

Richmond

Ashton I. Veramallay

Director, Center for Economic Education, Indiana University East

Richmond and surrounding areas in Wayne County continue to experience some of the beneficial effects of the current national economic expansion. The housing industry, for example, is benefit-

ing from falling mortgage interest rates made possible by the Fed's loosening of the money supply and by the Federal Housing Authority's new allocation of funds. Lower-cost loans, both variable and fixed, make increased activity in the real estate business relatively attractive.

Lower-cost loans are creating similar results in retail trade, especially in automobiles and recreational vehicles. The creative financing packages offered by General Motors, Ford, Chrysler, and American Motors provide consumers with the necessary incentives to make new purchases. Falling gasoline prices further fuel such incentives.

Moreover, the fears of terrorism and a declining dollar have cut tourism in Europe considerably. Consequently, more Americans, including local residents, are expected to spend their summer vacations in the United States, sampling a rich menu of natural beauty, historical record, culinary joy, and serene life. Vacationers, aided by lower inflation and higher personal incomes, will tend to spend more as they get away from the humdrum of daily toil. The Wander Indiana campaign, aimed at boosting Hoosier tourism, may show some strong gains, too.

In Richmond, the opening of the Radisson Hotel and the upcoming Rose Festival in June and July are likely to attract many tourists. This means that the service industry, particularly accommodation and catering, can expect accelerated business in the summer months. The service industry is expected to play an important role in the overall economic development of Wayne County and east central Indiana.

In Richmond, the opening of the Radisson Hotel and the upcoming Rose Festival in June and July are likely to attract many tourists. This means that the service industry, particularly accommodation and catering, can expect accelerated business in the summer months. The service industry is expected to play an important role in the overall economic development of Wayne County and east central Indiana.

The outlook for the manufacturing sector is not so exuberant as that for the retail and service sectors. Some firms are experiencing soft to stable demands for their products because of the national slowdown in manufacturing activities. The local economy is highly intertwined with the transportation industry. The inventory buildup of automobiles by Detroit producers is generating this adverse side effect, which may change in the fourth quarter. Thus, the unemployment rate is likely to hover around 9% unless it is offset by intra-growth in manufacturing and/or growth in tertiary activities. □

South Bend/ Mishawaka— Elkhart/ Goshen

John E. Peck

Professor of Economics, Indiana University at South Bend

Economic activity in the South Bend/Mishawaka and Elkhart/Goshen communities at midyear reflects the relatively good conditions experienced in the nation as a whole. Although the record is somewhat spotty, particularly in South Bend/Mishawaka, the 1986 area forecast (*IBR*, Nov.-Dec. 1985) calling for a period of modest growth appears, thus far, to be an accurate reflection of prevailing conditions.

The **Table** summarizes various indicators of local economic activity for the South Bend/Mishawaka and Elkhart/Goshen communities as tracked by Indiana University at South Bend's Bureau of Business and Economic Research. The figures contained in the table are seasonally adjusted and, with the exception of the unemployment rates and real estate data, are index numbers expressed as a percentage of base-year values. Comparative index numbers are given for January and February 1986. To highlight trends, index numbers are also given for a February 1986 to February 1985 comparison.

South Bend/Mishawaka

A short-term view of South Bend/Mishawaka area performance suggests a leveling off in February of employment gains realized in recent months. These gains pushed the nonagricultural employment index in January to the highest level attained in the three decades that data have been reported by the BBER. This short-term accomplishment, however, disguises the fact that the record-setting employment level was achieved entirely by a long-term increase in nonmanufacturing employment.

The manufacturing employment indicator rests in February at only slightly more than three-quarters of its 1967 base-year value. The loss of manufacturing employment in the community is a continuing phenomenon that reflects the phaseout and loss to the area of many major local manufacturing firms.

A short-term view of South Bend/Mishawaka area performance suggests a leveling off in February of employment gains realized in recent months. These gains pushed the nonagricultural employment index in January to the highest level attained in the three decades that data have been reported by the BBER.

Another relatively short-term development has been the strength of South Bend/Mishawaka's housing and real estate sectors. The area is sharing in the nation's housing resurgence, itself a predictable result of the current favorable interest rate environment. Local indicators of housing permits issued and real estate data covering

average days listed and the percentage of sale to list price are at their most favorable post-recession levels.

Elkhart/Goshen

A review of the Table highlights the short-term leveling off experienced in the Elkhart/Goshen February 1986 to January 1986 comparison. All employment and energy sales indicators were down.

On the other hand, the year-to-year comparison reflects a clearly positive trend. The nonagricultural employment index, up nearly 4% for the 12 months, is only seven-tenths of a point below its January 1986 historic high.

The indicator of housing permits issued shows accelerated activity for both the short and the longer term. In a related Elkhart County industry, shipments of manufactured housing are also up. A recent press release points out that, while the number of housing manufacturers in the Midwest has decreased by one-third since 1980, production at the remaining firms has increased by more than 16% in the same period.

Outlook

The general consensus is that favorable conditions should continue nationally throughout 1986. Such a forecast bodes well for the South Bend/Mishawaka and Elkhart/Goshen economies. Completion of the Bendix phaseout, however, will continue to hold manufacturing gains in check, and AM General's prolonged shutdown due to

Selected Economic Indicators for South Bend/Mishawaka and Elkhart/Goshen
(Seasonally Adjusted Indexes: 1967 = 100)

	South Bend/Mishawaka					*Elkhart/Goshen*				
				% Change from					*% Change from*	
	February 1986	*January 1986*	*February 1985*	*January 1986*	*February 1985*	*February 1986*	*January 1986*	*February 1985*	*January 1986*	*February 1985*
Employment data										
Nonagricultural employment	119.2	119.2	115.7	.0%	3.0%	171.5	172.2	165.1	– .4%	3.9%
Manufacturing employment	76.5	77.8	77.5	– 1.7%	– 1.3%	156.0	157.1	149.8	– .7%	4.1%
Nonmfg. employment	143.2	143.0	136.9	.1%	4.6%	194.2	194.6	187.4	– .2%	3.6%
Unemployment rate	6.0	6.4	8.6	n/app	n/app	5.4	5.7	7.4	n/app	n/app
Help wanted advertising	101.1	109.2	101.6	– 7.4%	– .5%	–	–	–	–	–
Utilities										
Industrial electricity sales	153.4	165.9	152.0	– 7.5%	.9%	198.5	207.9	198.0	– 4.5%	.3%
Commercial gas sales	133.5	164.3	151.8	–18.7%	–12.1%	173.2	198.9	117.4	–12.9%	47.5%
Industrial gas sales	79.5	97.4	91.0	–18.4%	–12.6%	298.6	308.7	318.6	– 3.3%	– 6.3%
Retail car and truck sales										
New passenger car sales	102.4	105.6	111.7	– 3.0%	– 8.3%	108.8	88.4	83.5	23.1%	30.3%
New truck sales	229.4	204.6	232.8	12.1%	– 1.5%	105.8	95.6	120.3	10.7%	–12.1%
Housing construction data*										
Estimated value of permits	830.4	761.3	239.3	9.1%	247.0%	279.8	288.3	220.9	– 2.9%	26.7%
Number of permits issued	175.7	147.5	60.5	19.1%	190.4%	142.2	121.0	83.2	17.5%	70.9%
Average value per permit	478.1	525.0	394.5	– 8.9%	21.2%	214.8	293.2	273.8	–26.7%	–21.5%
Residential real estate data**										
Number of active listings	1133	1050	1268	7.9%	–10.6%	1081	1035	1074	4.4%	.7%
Closed sales:										
Average days listed	62	65	75	– 4.6%	–17.3%	96	95	112	1.1%	–14.3%
Average market price	$48,336	$47,176	$43,228	2.5%	11.8%	$51,567	$51,351	$44,905	.4%	14.8%
% of sales to list price	94.4	94.2	92.8	.2%	1.7%	94.0	95.0	94.5	– 1.1%	– .5%

* All Elkhart construction data have a base year of 1970.
** Real estate data are not index numbers but are unadjusted weekly averages.
Source and definitions of data are available on request.

Hummer insulation problems poses a question mark.

In Elkhart, the critical factor is RV demand. Most forecasters see a good year in 1986, with interest rates and gasoline prices low and personal income increasing.

Given this general outlook, we expect South Bend/Mishawaka to experience 1986 employment gains in the range of 1% to 2%, while Elkhart/Goshen will see increases of from 3% to 4%. Both gains would push local activity to new highs. □

Muncie/ Anderson

Robert R. Jost

Professor of Economics, Ball State University

Attempting to thwart the national trend toward suburban sprawl and downtown decay is no mean task, but some dedicated citizens and officials of Muncie are trying to ensure that their city will not end up a suburban sprawl around nothing.

To this end, the Ball Foundation has made a major commitment to start construction of an $8-million cultural center, picturesquely located on a bluff overlooking the White River near the northern terminus of the downtown area. Many economists overlook the connection between amenities and economic development, but the potential for such a complex to draw people from east central Indiana and thereby create business for Muncie is very real. The center is aimed at enlarging the public's understanding of the experiences and the customs—the values and ideas, the cultural heritage—of people living in east central Indiana. The facility will provide an auditorium for the performing arts in an aesthetic setting, not unlike the much heralded Tanglewood in Massachusetts, as well as gallery space for industrial history projects and a gallery for local and traveling art exhibits.

Paralleling and complementing the cultural center complex is an endeavor to renovate and expand the historic downtown Roberts Hotel, to be operated under a franchise agreement with the Radisson Corporation. Additionally, a new Convention Center is to be built in the former federal building across the street from the Roberts Hotel. This hotel project has had several false starts over the years, but it now appears to have the backing of some of Muncie's most influential patricians as well as an investment banker's firm commitment to buy and market the necessary industrial revenue bonds. The Convention Center thus goes hand in hand with the hotel renovation, and city officials have conducted a marketing feasibility study to ascertain the potential demand for the planned exhibition hall and adjacent conference rooms. Both private and public revenues will finance the Convention Center.

Obviously adjacent hotel accommodations complement the Convention Center, and both should provide Ball State University with broader convention opportunities. The hotel would also supply the cultural center's demand for room accommodations. Nevertheless, the hotel and Convention Center appear to be relatively risky ventures.

Almost two decades have transpired since Muncie Foresight, a dedicated group of local citizens, initiated a plan for the revitalization of downtown Muncie. That plan recognized Ball Stores and J.C. Penney as major retail anchors at the southern terminus of the downtown shopping area, and it made provision for a new department store to be located at the northern limit of the retail district adjacent to the newly constructed Delaware County Courthouse. The plan also called for an inner-loop street pattern for vehicular traffic, off-street parking towers, and the creation of a pedestrian mall that subsequently would be enclosed and air-conditioned.

The pedestrian mall and the inner loop traffic pattern were completed, but the parking towers were never constructed and the mall was never enclosed. The width of Walnut Street once had been determined by the distance required to turn a horse and buggy around. As a consequence, the pedestrian mall was narrow although relatively attractive. However, the mall did little to stem the exodus of retail stores. The national trend of movement from city to suburbs continued apace in Muncie as new discount stores opted to build in shopping plazas located on the city's metropolitan fringes, rather than anchoring the northern limit of the downtown shopping district.

The very year Muncie Foresight announced its plan to rejuvenate the downtown area, Sears decided to close its downtown store and build a much larger outlet in the newly enclosed mall located on the fringes of the city. Other retail outlets, including Penney's, subsequently joined the exodus to the peripheries of the city. During these years, walking past the legions of vacant storefronts was akin to viewing the ruins of a once thriving ancient civilization.

What was left following the exodus of this once viable retail trade? Government employees filled the government buildings, and their agencies spilled over incongruously into vacated store fronts. Employees of Muncie's financial intermediaries are still centered in the heart of the city, but many of their transactions are now recorded in branches located in outlying neighborhoods. Omnipresent lawyers gain a respectable appearance by inhabiting old buildings with new façades, while less prestigious quarters are occupied by loan companies and retail jewelers.

The probability of drawing customers downtown is probably much greater if, for example, the downtown area contains several major apparel or shoe outlets rather than, say, one of each.

Why haven't the jewelry stores departed for the suburbs? There are competing jewelry stores in the large enclosed Muncie Mall, although the largest recently shut down for reasons not solely economic.

The fact remains that when many Muncie residents shop for jewelry, they continue to shop downtown. They have good reason. Several reputable jewelry establishments located in close proximity allow for comparative shopping. In short, the probability of drawing customers downtown is probably much greater if, for example, the downtown area contains several major apparel or shoe outlets rather than, say, one of each. But how does one get several apparel or shoe stores to venture where one alone frequently has trouble surviving?

Several parking lots (not ramps) have gone up, and vehicular flow-through and parking on the pedestrian mall are now permitted. New financial buildings are replacing the old. Nevertheless, retail businesses continue their exodus from the downtown area. The sole remaining downtown department store just recently announced its formal closing, although two branches continue to operate in outlying areas.

A successful entrepreneurial city must be willing to take risks associated with innovation and share power with the private sector in order to facilitate economic development.

Given this historical perspective, the hotel and Convention Center appear to be risky ventures. But a successful entrepreneurial city must be willing to take risks associated with innovation and share power with the private sector in order to facilitate economic development.

Of course, it can be argued that the functions of the downtown area have changed in accordance with the principles of supply and demand and that the retail businesses have gravitated to more profitable locations. Thus, where once a department store was planned to anchor the northern terminus, a large combined city-county security complex may be built, once legal obstacles are removed. In short, is the downtown area to function primarily for government, finance, and legal services?

Be that as it may, it is the downtown area that makes the first visible impression on visitors or company representatives who are contemplating locating in the city. Are they likely to be impressed by rows of vacant store fronts and the absence of pedestrians bustling about?

By contrast, Indianapolis has been most successful in rejuvenating its downtown area while retaining some of its retail business. Is it so surprising that John Naisbitt ranked the capital as one of the ten best cities in the nation in which to start a new business, or that the Bureau of Economic Analysis projects that Indianapolis will be among the top five cities in the nation in terms of personal income growth during the next fifteen years? (For the BEA's Muncie and Anderson MSA projections, see the Nov.-Dec. 1985 issue of the *IBR*.)

Horizon 91, the successor to Muncie Foresight, is obviously aware of Indianapolis's successes. It proposes to harness the best resources of the community in order to promote the economic development of the area. For Muncie, it is no longer a question of preserving the status quo, for the downtown economic base will continue to erode unless the community acts.

These projects are not being financed by Washington but by a partnership between business and city officials with a vested interest in providing efficient and effective management for the enterprises to succeed. These officials also recognize that servicing the needs of the east central Indiana citizenry requires easier access to Muncie than is afforded by a two-lane highway. City officials are currently in the throes of eliminating the remaining legal obstacles that block the construction of a four-lane connecting link to I-69.

Anderson

Anderson's downtown renewal scenario over the past two decades is quite similar to Muncie's in both timing and end results.

Like Muncie, Anderson's downtown mall renovation presents a panorama of vacant storefronts interspersed with undercapitalized ventures—the ghosts of a previously vibrant business community. While both Muncie and Anderson have demolished a goodly number of decaying buildings, Anderson has outperformed Muncie in this regard. Perhaps more than a third of the buildings that formed Anderson's downtown silhouette in 1960 are no longer there. However, unlike Muncie, Anderson planners made a frontal assault on the ubiquitous downtown parking problem by building two parking garages with ramps. Unfortunately, one of them recently has been closed because of structural defects.

Currently a $1-million project to improve the downtown river area is underway. It is hoped that additional investments in the project will follow this seed money.

The Anderson MSA is certainly not standing still. Reports from construction personnel indicate that construction in Madison County is the highest it has been in several years.

Just as Muncie's growth now appears to be centered along the McGalliard connecting link to I-69 in the northwestern periphery of the city, so Anderson's current growth is primarily oriented around its outer perimeter near I-69 and Scatterfield Road—adjacent to GM's new Magnaquench plant.

The Anderson MSA is certainly not standing still. Reports from construction personnel indicate that construction in Madison County is the highest it has been in several years. Pendleton and Elwood have major projects underway. Anderson has several apartment complexes, fast food outlets, shopping centers, and drug stores under construction in addition to a host of other building improvements. But how many of those apartments will be filled by tenants who not only shop in Indianapolis but work there as well?

If this analyst's relatively dire projections of continued large reductions in General Motors' Anderson employment are realized, is it not possible that, in the not too distant future, Anderson may become a satellite suburb, swallowed by Indianapolis? □

Terre Haute

Marvin Fischbaum

Professor of Economics, Indiana State University

When asked to explain his "portfolio selection theory," for which he won the Nobel Prize, economist James Tobin said, "Don't put all your eggs in one basket."[1]

Diversification reduces the risk of really dreadful outcomes. Ten years ago the very diversity of the Terre Haute manufacturing base seemed to provide insurance against a severe economic collapse. But improbable events do occur. A Challenger spacecraft can explode. A Chernobyl reactor can melt down. Ann Page, Stran Steel, CBS Records and Tapes, Midland Glass, Terre Haute Malleable—a cross section of the medium and large manufacturing plants in the community—can shut down.

Add J. I. Case to that list. That firm, which employs 460 and provided 800 jobs in better days, announced that it will phase out Terre Haute operations during the first half of 1987. The Case announcement came as the area appeared to be coming out of a brief slowdown, just when near to intermediate term prospects appeared to be improving.

Six months ago, as employment levels appeared to be growing at an unsustainable rate, the Terre Haute economy faced the prospect of a difficult 1986. What had appeared to be an inexplicable disparity in 1985 between rather robust gains in area employment and apparent flatness in underlying business has been largely resolved by sharp downward revisions in employment estimates. Last fall, the preliminary estimate had establishment employment in the four counties of Clay, Vigo, Sullivan, and Vermillion rising by a sharp 13%, from 69,700 in January 1985 to 78,185 in September. Benchmark revisions reduced employment to 68,110 for January and 73,290 for September, which amounts essentially to a seasonal 8% increase.

Since labor force estimates have been reduced almost as much as employment estimates, revisions in the unemployment rate have been relatively modest. The preliminary September seasonally adjusted rate for the MSA had been 6.8%; the revised rate is 7.3%. By February 1986, the preliminary seasonally adjusted unemployment rate for the MSA rose to 7.9%

The **Figure** may help place these developments in perspective. The change in establishment employment from the level of 76,960 employed in September 1979 is plotted at six-month intervals from March 1979 to March 1986. Had the preliminary estimate for September 1985 been plotted, it would have been off the top of the scale. The chart suggests that seasonal factors in area employment may recently have become more pronounced. If so, then over the past three years the trend in employment has been flat.

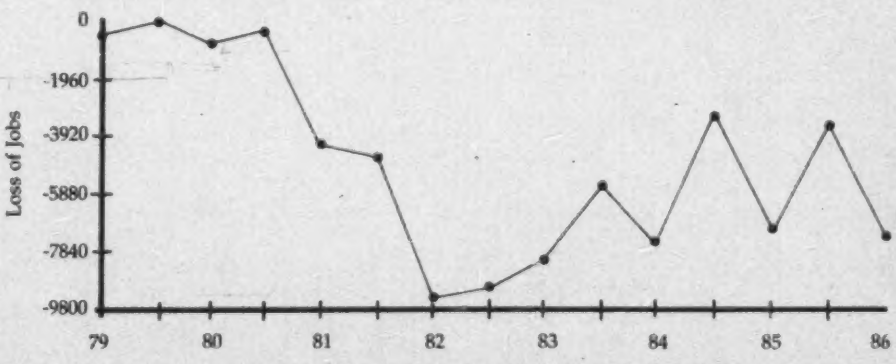
Construction activity also experienced some decline. For the first quarter of 1986, F. W. Dodge reported that residential contracts dropped 11% and nonresidential construction fell 40%. The value of construction permits in Vigo County also dipped. In the nonresidential sector, a variety of ventures in the $250,000 range could not offset the absence of any major new project.

In the residential sector, the apartment boomlet abruptly stopped. Single-family new home construction remained depressed until April, when permits for 23 homes on scattered sites provided the highest monthly total in several years. Sales of existing homes, responding to sharply lower interest rates, did rise. Inventories of homes for sale remain at near record levels, however, and any price increases have been slight.

Construction activity will pick up in the second half of 1986 and probably into 1987.

Construction activity, though, will pick up in the second half of 1986 and probably into 1987. Renovation of the main classroom building at Rose Hulman Institute of Technology and construction of the new health sciences and physical education

Changes in the Terre Haute MSA Four-County Employment Figures (Vigo, Clay, Sullivan, and Vermillion Counties) from September 1979



Source: *Labor Force Estimates*, Indiana Employment Security Division, Labor Market and Statistical Services, Indianapolis, Indiana, April 3, 1986.

1. *Newsweek*, Oct. 26, 1981, p. 62.

building at Indiana State University have just begun, as has expansion at Bemis Bag. That $8-million project at Bemis should lead eventually to the creation of 75 to 100 production jobs.

Spectrum Ink, attracted by the presence of Ivy Hill, is coming to town, initially with 25 jobs. (Ivy Hill Packaging, which also started small, was in turn attracted by the proximity of the now departed Columbia Records plant.) A projected expansion at Ivy Hill may add 100 to 150 manufacturing jobs.

The main growth point in the local economy remains Sony's DADC. When the plant opened in September 1984, it produced 300,000 compact audio discs per month. By the start of 1986, production was up to 1 million discs per month. By the end of the year, that production rate should double. Present plans call for redoubling output in 1987.

The main growth point in the local economy remains Sony's DADC. When the plant opened in September 1984, it produced 300,000 compact audio discs per month. By the start of 1986, production was up to 1 million discs per month. By the end of the year, that production rate should double. Present plans call for redoubling output in 1987. From its initial 90, employment has increased to its present 300 and may possibly go up to 600. The Sony facility remains the only plant of its type in the U.S. and one of only twelve in the world. U.S. sales of compact audio discs (Terre Haute and imported) were:

1983—$ 17,000,000;
1984—$103,000,000; and
1985—$320,000,000.

Estimates are that by 1990 worldwide sales of laser discs for audio, video, and data storage purposes might total four billion dollars. While growth is breathtaking, the Terre Haute monopoly will not last long. A joint venture of DuPont and Phillips Nv. will build in North Carolina, and Capitol-EMI, Warner, and—yes—CBS are planning, or at least considering, their own entries.

J. I. Case, a subsidiary of Tenneco, produces agricultural and construction equipment. The local plant makes loaders. A year ago Tenneco acquired the divisions of International Harvester that produced competitive products, creating redundant capacity. This year, with declining petroleum prices eroding Tenneco's main source of profits, cost-cutting measures were sought.

Tenneco is closing three of its twelve J. I. Case plants. It is not clear why Terre Haute is included. Recently Case lost an $8-million Department of Defense contract to Fiat-Allis of Italy. The people of Terre Haute received national attention when they supported Case by writing more than ten thousand letters to Washington. Congress overruled the DOD, but the contract will have no effect on Terre Haute production.

Over the next 18 months, prospective gains in employment at Sony, Bemis, Ivy Hill, and elsewhere should compensate for the loss of jobs at J. I. Case, although possibly not for the loss of payroll. In today's somewhat positive economic environment, the Case plant closing should not have the devastating impact of say, CBS, but it will hurt! □

Lafayette

William C. Dunkelberg

Professor of Economics, Purdue University

Overall, the economic environment in the Greater Lafayette area is excellent. The current unemployment rate is 4.4%. Total employment stands at 61,400, up 1,000 from April 1985, up 700 from March, but unchanged from December 1985 (see **Table**).

Greater Lafayette Employment by Industry (in Thousands)

Industry	*April 1985*	*Dec. 1985*	*April 1986*
Manufacturing	11.3	11.4	11.5
Construction	1.7	1.6	1.6
Transportation	1.7	1.8	1.7
Wholesale	1.6	1.7	1.6
Retail	10.9	11.5	11.1
Financial	2.6	2.7	2.7
Service	10.3	10.4	10.4
Government	20.3	20.1	20.8
Total	**60.4**	**61.4**	**61.4**

The employment trends—flat, but at a high level—are reflected in other indicators of economic activity. Overall, retail sales, like employment, show very modest gains after adjusting for inflation, although the year is expected to end on an upbeat note. Employment in the manufacturing sector will remain steady throughout the year, reflecting continued strength in orders but no increases in demand.

Compared to a year ago, only the manufacturing sector shows slightly lower employment. Government (particularly educational services) has been a major contributor to employment growth over this period, accounting for about 50% of the net gain. Employment gains in all other industries were modest.

The outlook for construction is improving because of the expectation of major capital investment activity on the part of both new and existing firms in the area. Although this activity will improve the employment outlook for the next twelve months or so, the new investment will produce few new permanent jobs. Much of the investment is geared to cost reduction to maintain competitiveness in larger regional, national, and international markets.

Still, these factors combined mean positive employment growth in the Greater Lafayette area, and the outlook for the balance of the year remains an optimistic one. Growth will not be exceptional, but economic activity will remain healthy, supporting a high level of employment. □

Jeffersonville-New Albany (Louisville Area)

Fay Ross Greckel

Professor of Economics, Indiana University Southeast

The Louisville metropolitan area continued to grow slowly and unevenly during the past six months.

Employment data portray reasonably well the pattern of this less than vigorous expansion. Total employment in nonagricultural establishments within the seven-county metropolitan area (Clark, Floyd, and Harrison Counties in Indiana and Jefferson, Oldham, Bullitt, and Shelby Counties in Kentucky) increased from an average of 398,300 jobs in the first quarter of 1985 to 410,200 jobs in the first quarter of 1986. This was a respectable, though far from spectacular, twelve-month gain, but it still left the level of payroll employment below its 1979 peak.

Manufacturing employment remained weak, with a net loss of 3,500 jobs between the first quarter of 1985 and the first quarter of 1986. Most of the decline occurred in durable goods industries, particularly in firms producing machinery or transportation equipment. As usual, nonmanufacturing job growth more than made up for this decline. Nonmanufacturing employment during the first quarter of this year averaged 329,200, an increase of 18,600 jobs over the first quarter of 1985. Nearly two-thirds of these new jobs were in retail and wholesale trade, which added 6,400 employees, and in the service sector, which grew by 4,800 workers.

Between these same periods, total nonfarm employment in the Indiana portion of the metropolitan area remained virtually unchanged, averaging approximately 51,500. Small gains in nonmanufacturing employment failed to completely offset the loss of about 600 manufacturing jobs. This stagnant employment situation represents a significant departure from earlier trends in the three Indiana counties, which had previously enjoyed relatively stronger employment growth—including job gains in the manufacturing sector—than in the Kentucky portion of the metropolitan area. It is too early to tell whether or not employment in the Indiana counties will soon be returning to its prior growth path.

First-quarter building permit statistics suggest a slowdown in residential construction, particularly in new apartment units. The first four months of 1985 represent a very active period for residential building permits in Jefferson County (Ky.) and also in Floyd and Clark Counties (Ind.)—the three major counties of this metropolitan area. There was a substantial reduction in the number of residential building permits issued in these counties during the first four months of 1986, although permits for single-family dwellings were not very different from 1985.

Concern about the anticipated changes in federal income tax treatment of real estate investments will probably continue to discourage new rental projects.

Since apartment and condominium building is somewhat more sporadic than single-family construction, the picture could change during the rest of the year. However, concern about the anticipated changes in federal income tax treatment of real estate investments will probably continue to discourage new rental projects. Single-family housing should fare somewhat differently. With nominal interest rates lower than in previous years, coupled with some apprehension that they may rise in 1987, construction of single-family homes may accelerate.

In other sectors, the general prognosis for the remainder of 1986 is for more of the same: continued slow and uneven growth. □

Evansville

Maurice Tsai

Professor of Economics, University of Evansville

The Evansville economy grew at a modest rate in 1985. The Evansville Area Business Index registered 109.44 compared to 1984's 107.91, a growth rate of 1.4% (see **Table**).

The poor performance of the national economy was partially reflected in the performance of the local economy. The real gross national product increased by 2.23% in 1985, with slow growth rates of 1.1% and .7% in the second and fourth quarters respectively. The sluggishness of the 1985 national economy was caused by a decline in real investment, zero increase in labor productivity, and expanded trade deficits. The impacts on the regional economy were declines in the manufacturing and finance activities, the first time that such declines had occurred since the 1981-82 recession.

Other sectors in the regional economy, however, manifested some growth. The construction sector grew by 4.9% and the transportation sector by 4.3%. The trade and services sector has maintained its steady growth since 1982. The employment index rose by 2.9%, a repeat of 1984's performance. The unemployment rate was reduced from 9% to 7.5% by the end of 1985.

Compared to a very slow fourth quarter for the national economy, the Evansville economy showed an upward surge of activity, especially in November and December of last year.

The outlook for the local economy in 1986 needs to be revised from the earlier report (*IBR*, Nov.-Dec. 1985: 20-21). Compared to a very slow fourth quarter for the

national economy, the Evansville economy showed an upward surge of activity, especially in November and December of last year. The momentum was still very obvious in the January and February statistics, the most recent data available.

The leading factor in this economic surge has been the construction sector. The City of Evansville is currently undertaking a huge improvement of the transportation network within and around the city. Within five years a new airport terminal and ten major road projects will be completed at a total cost of $290 million. The Lloyd Expressway, the east-west highway through the city, will be completed in 1988, and Interstate 164, a circular highway around the east and south of the city, will be completed by 1990. Both will cost more than $100 million. The completion of a $20-million airport terminal next year will make Evansville more accessible to other parts of the country. A large portion of these projects are commissioned from local construction firms so that the incomes generated from the projects stay within the community. The impact of these heavy construction activities has begun to be felt in the construction index, which is expected to rise 38% in 1986. Furthermore, the spinoffs will spread to most of the business sectors.

The impact of heavy construction activities has begun to be felt in the construction index, which is expected to rise 38% in 1986.

The industrial sector, which had a poor performance in 1985, will become more active this year. Whirlpool, on Highway 41, will increase its work force in the spring because of unexpected strong demand for refrigerators, partly due to the expansion in the housing industry. The Warrick operation of Alcoa recently adopted a new aluminum ingot casting method for more efficient production with lower costs. As a result of its corporate restructuring, the Bristol-Myers Company is moving 250 employees from Syracuse, New York, to Evansville. Sunbeam Plastic Corporation is planning a $15-million expansion project to raise its productive capacity. In mid-1986 the T. J. Maxx Company is to begin operation, with a maximum employment of 1,800. These new developments will result in raising the industrial production index to the 120 level, compared with 113.4 in 1985.

The local employment situation should continue to improve in 1986. The Evansville MSA (three counties in Indiana and one county in Kentucky) had an employment of 122,400 in January 1985 and 129,000 in the same month of 1986. Based on the seasonal pattern, the total employment is expected to rise in the months ahead. The unemployment rate in Evansville is still high. It was 7.8% in February 1986, while the national rate was 7.3% and the state rate 6.9%. The reduction in the unemployment rate in 1985 was a result of two factors:

- Reduction in the size of the local labor force; and
- An increase in job opportunities.

Judging from the activities in the first quarter, the Evansville economy will have a good year in 1986. Its annual growth rate may be the highest since the 1981-1982 recession.

As more jobs are expected to open in the months ahead, the unemployment rate should go down to around 7% or less.

Judging from the activities in the first quarter, the Evansville economy will have a good year in 1986. Its annual growth rate may be the highest since the 1981-1982 recession. The Evansville Area Business Index is expected to rise from 1985's 109 to 115, a growth rate of 5.5%. □

Evansville Area Business Index
(1977 = 100)

Period	Industrial Production	Trade & Services	Construction	Transportation	Finance	Employment	Composite Index
Quarterly Index							
1984/1Q	120.00	106.05	104.58	95.18	105.03	103.23	109.63
1984/2Q	114.52	104.70	108.09	94.11	106.40	102.07	107.47
1984/3Q	111.17	106.12	100.73	95.15	106.56	103.70	106.34
1984/4Q	114.27	107.18	101.24	95.69	106.65	106.04	108.21
1985/1Q	117.41	109.63	104.69	100.12	103.43	106.16	110.63
1985/2Q	112.18	109.27	103.92	98.43	103.97	105.40	108.45
1985/3Q	109.84	106.74	113.07	99.34	105.26	107.10	107.92
1985/4Q	114.23	109.83	113.11	98.74	108.51	108.64	110.77
1986/1Q	121.17	109.77	146.69	98.67	107.26	106.64	115.81
Annual Index							
1981	108.83	102.28	107.63	98.94	97.75	105.57	105.01
1982	104.52	102.36	103.62	93.23	102.40	102.85	102.64
1983	108.14	104.10	116.09	91.36	104.60	100.71	105.41
1984	114.99	106.01	103.66	95.03	106.16	103.76	107.91
1985	113.40	108.87	108.70	99.16	105.29	106.82	109.44
1986 (proj.)	120.50	111.80	150.00	101.00	107.50	108.50	115.50

Gary—Hammond—East Chicago (Calumet Area)

Leslie P. Singer

Professor and Coordinator of Economics, Indiana University Northwest

The question asked in northwest Indiana is, When will local manufacturing, particularly steel, stop laying off personnel and begin the economic turnaround that all other Indiana MSAs experienced two years ago? Indiana MSAs had their recessions in manufacturing in 1983. Except for northwest Indiana, all passed their lower turning points by 1984.

Taking yearly averages, communities rebounded in 1984 at the following rates:

Anderson	- 12.3%;
Elkhart-Goshen	-14.15%;
Evansville	- 9.52%;
Fort Wayne	- 9.49%;
Indianapolis	- 4.7%;
Lafayette	- 9.71%;
Muncie-Anderson	- 6.6%;
New Albany	-11.11%;
South Bend-Mishawaka	- 9.2%; and
Terre Haute	- 1%.

Contrary to the trend, northwest Indiana manufacturing on an adjusted year-to-year basis dropped 32.3% from 1979 to 1983, 7% from 1983 to 1984, and 8.9% from 1984 to 1985. On an adjusted basis, accounting for periodic fluctuation within the year, these declines amount to a total loss of 42.5% in manufacturing employment in northwest Indiana from 1979 to the end of 1985.

Other Indiana MSAs have experienced a few minor ups and downs in manufacturing employment and output, but only northwest Indiana has experienced an uninterrupted slide that continues to point downward.

What makes northwest Indiana different from other industrialized regions in the state? The answer is steel. Steel is peculiar because the product is purchased by other firms, not by consumers. Steel producers are oligopolies. They comprise an industry with few large sellers. The buyers of steel, particularly the customers of integrated mills such as those that operate in northern Indiana, are also oligopolies in their own right. Both General Motors and U.S. Steel have considerable market power. Both sellers and buyers are under pressure from foreign suppliers. Both are operating with high wage contracts and antiquated work rules. Moreover, foreign suppliers have the same production technology as do the mills in northwest Indiana.

Other Indiana MSAs have experienced a few minor ups and downs in manufacturing employment and output, but only northwest Indiana has experienced an uninterrupted slide that continues to point downward.

The market power of General Motors and other large steel customers exerts a downward pressure on prices. Other manufacturing industries that sell directly to consumers have a better chance to adjust their margins. Clearly a large number of widely dispersed small buyers cannot match the concentrated market power of large corporations.

There is no doubt that the steel industry should have realized this state of affairs a long time ago. In order to understand why the steel industry failed to innovate and thus adjust to the international challenge, we must distinguish between two kinds of technologies.

Factor-improving technologies, such as continuous casters (which reduce labor hours per ton of steel), make the factor of production—in this case, labor—more productive.

Product-improving technologies, such as electrolytic zinc-plating (which enhances the product's rust resistance), improve the product instead of merely improving its production.

Factor-improving technologies have relatively stable payoffs over the short run. Product-improving technologies, on the other hand, often exhibit uncertain payoffs over a much longer period.

In high-wage industries there is a bias towards factor-improving technologies. Here capital is a substitute for labor. In lower-wage industries, such as electronics and communications, there is a bias towards product-improving technologies, where labor is a complement of capital.

Steel managers found immediate and measurable rewards in factor-improving technologies. Thus, product-improving technologies, which would have given the steel industry a keener competitive edge, were neglected.

The computer industry is a prime example of judicious application of product-improving technologies. To some degree the automobile industry is another good example. As a general rule, industries that aggressively develop product-improving technologies are likely to be able to meet foreign competition head-on and can retain or even expand their share of global markets. This is not likely to be the case with industries such as steel, which still rely too heavily on factor-improving technologies, where the U.S. has no real comparative advantages.

Steel managers found immediate and measurable rewards in factor-improving technologies. Thus, product-improving technologies, which would have given the steel industry a keener competitive edge, were neglected.

Disinflation and changing inventory policies have also hurt local steel plants, which were used to shipping in bulk. When inflation was in double digits and higher than interest rates, firms made capital gains on accumulated inventory. With no inflation of product prices, real interest rates are

(continued on last page)

Table 1
Northwest Indiana Wage and Salaried Employment
(Adjusted Quarterly Rates in Thousands of Employees)

	Actual				Projected				
	1979	*1982*	*1985*	*1986/1Q*	*1986/2Q*	*1986/3Q*	*1986/4Q*	*1987/1Q*	*1987/2Q*
Manufacturing employment	103.8	77.2	60.4	60.2	60.4	60.6	60.3	60.1	60.0
Steel employment	66.6	52.7	37.6	37.3	37.1	37.1	37.0	36.9	36.9
Manufacturing less steel and petroleum	33.5	20.8	19.0	19.4	19.9	19.8	20.0	20.1	20.2
Nonmanufacturing employment	164.0	150.8	153.2	154.0	154.6	155.4	156.9	157.5	158.0
Services	41.2	38.8	41.7	43.3	42.4	42.6	43..3	44.0	44.1
Trade	53.4	47.3	47.6	48.1	48.5	48.9	49.1	49.8	49.9
Government	30.7	30.4	31.6	31.4	31.1	31.0	31.4	30.7	30.5
Total Employment	**267.8**	**228.0**	**213.6**	**214.2**	**215.0**	**216.0**	**217.2**	**217.6**	**218.0**
Private nonmfg. employment	133.3	120.4	121.6	122.6	123.5	124.4	125.5	126.8	127.5

Note: Numbers may not add to totals because of rounding.

Table 2
Northwest Indiana Actual and Projected Payrolls
(In Billions of Current or Constant 1979-Based Dollars: Annual Rates)

	Actual Payroll				Projected Payrolls				
	1979	*1982*	*1985*	*1986/1Q*	*1986/2Q*	*1986/3Q*	*1986/4Q*	*1987/1Q*	*1987/2Q*
Manufacturing									
In current dollars	2.161	2.318	1.769	1.779	1.783	1.693	1.683	1.659	1.635
In constant 1979 dollars	2.161	1.463	1.157	1.131	1.139	1.083	1.084	1.075	1.066
Steel									
In current dollars	1.451	1.558	1.188	1.190	1.191	1.183	1.181	1.172	1.179
In constant 1979 dollars	1.451	1.296	1.022	1.012	1.015	1.011	1.010	.991	.989
Manufacturing less steel and petroleum									
In current dollars	.753	.973	.695	.699	.692	.683	.678	.679	.661
In constant 1979 dollars	.753	.659	.372	.371	.369	.364	.365	.366	.355
Nonmanufacturing									
In current dollars	2.29	2.307	2.418	2.438	2.441	2.448	2.449	2.442	2.499
In constant 1979 dollars	2.29	1.919	2.080	2.071	2.081	2.089	2.082	2.080	2.084
Total									
In current dollars	4.451	4.625	4.187	4.217	4.224	4.141	4.132	4.101	4.134
In constant 1979 dollars	4.451	3.382	3.237	3.202	3.220	3.100	3.166	3.155	3.150

still high. This raises the cost of carrying inventory.

If local steel companies continue to experience diminished cash flows, very little new investment will take place beyond what is currently in progress. Thus, even if the U.S. economy accelerates its growth rate in the third and last quarters of 1986, this will not suffice for an upsurge in local manufacturing.

Moreover, the falling dollar will have only a minor impact on steel. Importers will switch from European imports to third-world imports. Third-world exporters tend to quote prices in dollars, which neutralizes the impact of favorable foreign exchange rates.

Table 1 shows northwest Indiana employment. **Table 2** lists payroll in both current and in 1979 dollars in order to show the trend in local income in dollars of constant purchasing power. Alas, few revisions have been made in the forecast. A robust upturn is still not in the cards.

Steel capacity in developing countries is growing at a rate of 8.1% annually. Annual U. S. steel consumption by 1990 will rise by only about 1 million tons. Minimills will take about 40% of total steel output, which will further debilitate steel plants in northwest Indiana. □

Indiana Business Review

Indiana Business Research Center
Graduate School of Business
Indiana University
Bloomington, Indiana 47405

July 1986

Nonprofit Organization
U.S. Postage
PAID
Bloomington, Indiana
Permit No. 2

00899 8306
CHERYL WALDMAN
CONGRESSIONAL INFO SERV SRI
4520 EAST WEST HWY
BETHESDA MD 20814